

## **REMARKS**

Claims 1-12 have been amended to correct typographical errors and to incorporate language that is more conventional in U.S. patent practice. In addition, claims 1 and 12 have been re-written in the alternative, as suggested by the Examiner; thus, the rejection of claims 1 and 12 under 35 U.S.C. § 112, second paragraph, is deemed moot. Claims 14-16, 18, and 19 have been withdrawn in light of the finality of the restriction requirement. The Abstract has been amended to comply with the 150 word limitation; a replacement Abstract is submitted herewith. No new matter has been added.

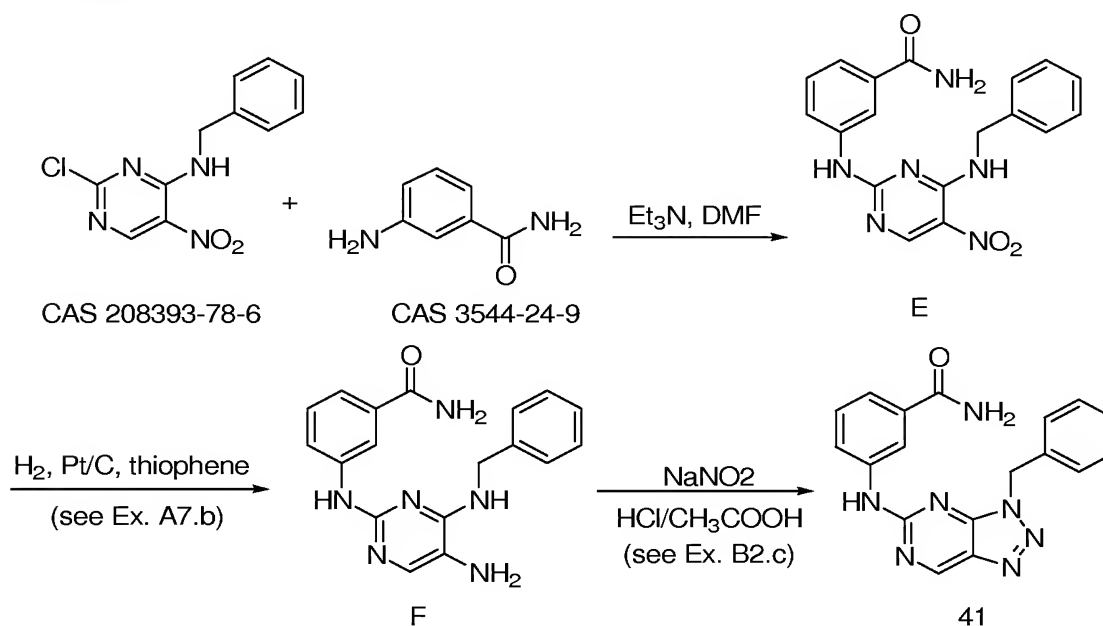
The Applicants thank the Examiner for advising that a certified copy of the foreign priority document had not yet been filed. In accordance with 35 U.S.C. 119(b), a certified copy of EP03/50310 will be submitted.

Claims 1-13 and 17 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly non-enabling for triazolopyrimidines not substituted by a phenyl group in the 3-position. The Applicants submit that adequate instruction has been provided to enable the full scope of the present claims and respectfully request withdrawal of the rejection.

The first paragraph of 35 U.S.C. § 112 requires nothing more than *objective* enablement. A specification that teaches how to make and use the invention in terms commensurate in scope to the claims *must* be taken as complying with the first paragraph of 35 U.S.C. 112, *unless* there is reason to doubt the objective truth of the statements relied upon for enabling support. *Stahelin v. Secher*, 24 U.S.P.Q.2d 1513, 1516 (B.P.A.I. 1992) (citing *In re Marzocchi*, 439 F.2d 220, 169 U.S.P.Q. 367 (C.C.P.A. 1971)). The Applicants submit that the Office has not provided adequate reason to doubt that the specification provides sufficient enabling support for the full breadth of the claims.

The Applicants direct attention to compound no. 46 (Table I, page 75). Compound no. 46 is not substituted with a phenyl or substituted phenyl; rather, it is substituted with a benzo-1,4-dioxane. As indicated in Table I, compound no. 46 can be prepared according to the procedure set forth in Example B2.d. Thus, compounds other than 3-phenyl or 3-substituted phenyltriazolopyrimidines have indeed been described in the specification.

The Office cites that the synthesis of compound no. 41 is “unclear via the current specification.” On the contrary, the specification indicates that compound no. 41 is prepared in accordance with Example B2.c, page 66, which sets forth explicit reaction conditions. In addition, the specification details that intermediates of formula V can be prepared via the reaction of an intermediate of formula VIII, wherein  $W_2$  is a leaving group, for example, chloro, with an intermediate of formula IV, in the presence of a base. *See* specification at page 26. The specification further instructs that intermediates of formula II can be prepared via reduction of intermediates of formula V. *See* specification at page 25. Finally, intermediates of formula II can be converted to compounds of formula I by cyclization of an intermediate of formula II in the presence of a nitrite salt (i.e.,  $\text{NaNO}_2$ ) and a suitable acid. *See* specification at page 18. Thus, in accordance with the specification, one of skill in the art would have identified that compound no. 41 could be produced according to the following reaction sequence:



Expressly, known compound CAS 208393-78-6 (an intermediate of formula VIII wherein  $W_2$  is chloro and  $R_2$  is benzyl) is reacted with known compound CAS 3544-24-9 (an intermediate of formula IV) in the presence of base ( $\text{Et}_3\text{N}$ ) to form intermediate E (an intermediate of formula V). *See* Exhibit A, submitted herewith. Intermediate E is then hydrogenated using platinum on carbon in the presence of the catalyst poison, thiophene, to

form intermediate F (an intermediate of formula II) (see exhibit A and Example A7.b for reaction conditions). Finally, cyclization, using the reaction conditions set forth in Ex. B2.c, provides compound no. 41. *See also* Exhibit A. The Applicants submit that the synthesis of compound no. 41 is clear and that compound no. 41 can be readily prepared using known starting materials.

The Office further expresses doubt that the reaction conditions set forth in the specification for the reduction of nitro to amine followed by cyclization to produce compounds of formula I are compatible with the full scope of the claims  $R_2$  and  $R_3$  groups. Specifically, the Office cites that Pt/C and Pd/C hydrogenation will reduce alkenyl, alkynyl, and heterocyclic ring groups. While the Applicants do not dispute that alkenyl, alkynyl, and heterocyclic ring groups can be reduced under *certain* Pt/C and Pd/C hydrogenation conditions, the Applicants submit that such conditions are only an example of the type of reducing conditions known that can be used to form the claimed compounds. As set forth in the specification, and in the scheme above, catalyst poisons may be employed to selectively reduce the nitro group. Moreover, the specification sets forth that in addition to hydrogenation, reduction using hydrazine would be appropriate. In light of the many reduction conditions known in the art, the Applicants further submit that one of skill in the art would be able to identify other reducing conditions that would selectively reduce the nitro in the presence of other reducible groups, with only routine experimentation.

The Office further cites that 6 N HCl can react with ethers, alkynes, and alcohols. The Applicants note that 6 N HCl is only one example of suitable reaction conditions. The specification also notes that milder 1 N HCl conditions would be suitable. *See* specification at page 18. Moreover, in light of the many acids commercially available, one of skill in the art would be able to identify suitable acidic conditions to perform the cyclization reaction, using only routine experimentation.

The specification, at pages 18-32, sets forth detailed reaction schemes and discussion of several modes of preparation for the claimed compounds and intermediates of the present invention. The Applicants also direct attention to pages 20-24, where methods for the conversion of certain compounds of formula I into other compounds of formula I are set forth. In addition, detailed, exemplary experimental procedures are set forth in the specification at pages 42-71. Armed with the specification, one of skill in the art would be

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**PATENT**

able to prepare the claimed compounds using readily available starting materials, with only routine experimentation. The Applicants submit that the Office has not provided sufficient reason to doubt that the specification is enabling for the full scope of the claimed invention and request that the rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

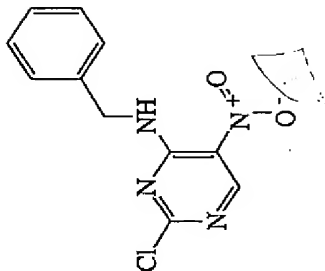
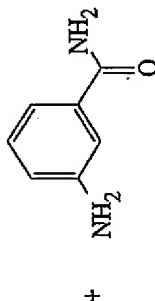


The Applicants believe that the foregoing constitutes a complete response to the Office Action and submit that all pending claims are in condition for allowance. An early Office Action to that effect is, therefore, earnestly solicited.

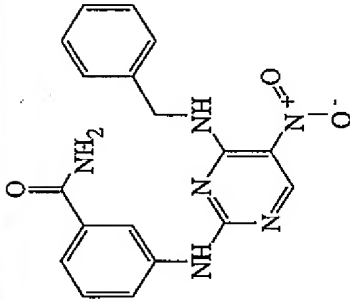
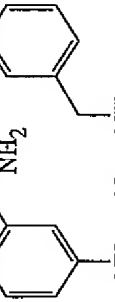
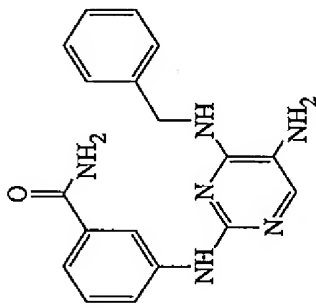
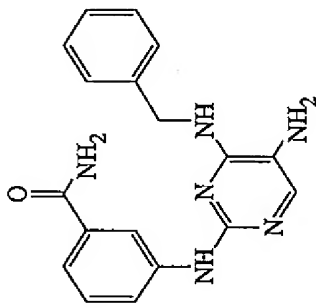
Date: October 10, 2007

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<div><b>Descriptors</b> R218065 : Unspecified</div> <table><thead><tr><th>Label</th><th>Quantity</th><th>Mol</th><th>Identification</th><th>Reference</th></tr></thead><tbody><tr><td>A</td><td>3.15 g</td><td>0.0120</td><td>V_NR WEMB_0015_078_1</td><td>=CAS 208393-78-6</td></tr><tr><td>B</td><td>1.63 g</td><td>0.0120</td><td>SUPP 206172</td><td>=R155326</td></tr><tr><td>C</td><td>1.66 ml</td><td>0.0120</td><td>Et3N</td><td></td></tr><tr><td>D</td><td>50 ml</td><td></td><td>DMF</td><td></td></tr></tbody></table> <div><b>Origin</b> Rnr Yield Fraction Previous fraction WEMB_0015_085_1 218065 77% 1</div> <div><b>MW</b> Formula 364.36 C18H16N6O3 -Unspecified</div> <div><b>Procedure</b> A solution of A (0.012 mol), B (0.012 mol) and C (0.012 mol) in D (50 ml) was stirred for 2 hours at 60 °C. The mixture was allowed to cool to room temperature and methanol (10 ml) was added. The mixture was stirred for 10 min and the resulting precipitate was filtered off, washed and dried. Yield: 3.3 g WEMB_0015_085_1 (77%). The filtrate was evaporated under reduced pressure. Yield: WEMB_0015_085_2.</div>		Label	Quantity	Mol	Identification	Reference	A	3.15 g	0.0120	V_NR WEMB_0015_078_1	=CAS 208393-78-6	B	1.63 g	0.0120	SUPP 206172	=R155326	C	1.66 ml	0.0120	Et3N		D	50 ml		DMF		<div><b>Chemical Names</b> A : B ( R155326 ) : C : D : R218065 : Melting Point : Optical Rotation : R218065 :</div>	
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<div></div> <div>Unspecified 2617563-AAA A</div>		<div></div> <div>Pt/C, 5% thiophene soln.</div>		<div></div> <div>DMA H2</div>		<div></div> <div>2603770-AAA WEMB_0015_093_1</div>																																					
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